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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,455	11/07/2001	Masaei Tsurumaki	520373.90239	4308
26710	7590	10/17/2003	EXAMINER	
QUARLES & BRADY LLP 411 E. WISCONSIN AVENUE SUITE 2040 MILWAUKEE, WI 53202-4497			PASSANITI, SEBASTIANO	
		ART UNIT	PAPER NUMBER	
		3711	7	
DATE MAILED: 10/17/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application N .	Applicant(s)
	10/045,455	TSURUMAKI, MASAEI
	Examiner Sebastiano Passaniti	Art Unit 3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 31 July 2003.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-7 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a)  The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

### DETAILED ACTION

This Office action is responsive to communication received 07/31/2003 – Amendment A and Request for Extension of Time, and Information Disclosure Statement (IDS).

Claims 1-7 remain pending.

Following is an action on the MERITS:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vista in view of Kobayashi ('998), Motomiya, Zebelean, Peterson and Taiwan Patent Nos: 055904 and 391359. Vista discloses the invention substantially as claimed and includes at least two distinct shell pieces (face and crown sections) attached together to form a club head structure and further including a process to remove a thickness from the interior metal shell. Vista lacks an explicit showing of a plurality of shell pieces that specifically include a face shell, crown shell, sole shell and peripheral side shell. In addition, Vista does not specifically mention "blast grinding". Rather, Vista notes that the interior of the striking plate is dimensioned to have grooves through any one of a hot or cold stamping, forging or swaging operation (col. 2, lines 23-28). Each of Kobayashi, Motomiya and Zebelean show it to be old in the art to fabricate a hollow metallic club head using a plurality of shells that are subsequently welded or otherwise attached

together. For example, Kobayashi shows distinct crown, face and sole/side shell pieces (Figure 4). For instance, Zebelean notes that the hollow club head may be formed of two or more pieces may be cast and secured together, with the number of parts directly affecting the cost of the operation (column 5, lines 29-37). By way of another example, Motomiya shows a variety of arrangements wherein the club head may comprise two or three shell pieces formed by forging or casting techniques (Figures 2, 3). In view of the patents to Kobayashi, Zebelean and Motomiya, it would have been obvious to modify the device in the cited art reference to Viste by fabricating the club head from a plurality of shell pieces based upon the specific manufacturing process used and the cost constraints of the head. With respect to the specific, claimed "blast grinding", the reference to Peterson obviates the use of any one of a number of common finishing operations such as grinding and sand blasting (column 1, lines 57-65). In addition, the prior art Taiwanese patents provided by the applicant (IDS received 07/31/2003) disclose that blasting is a common form of grinding used to adjust the thickness of an object. As the applicant indicates that shot or sand material may be used in the blasting operation and since Peterson indicates that sand blasting and grinding are commonly used to improve the appearance of the head, and since the Taiwanese patents reference blasting as a common form of grinding, it would have been obvious to simply take advantage of a blast grinding technique in place of the formats used by Viste to form the internal grooves on the striking plate in order to make use of another commonly available operation that is useful for altering the thickness of an object.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kobayashi ('742) shows internal cavities formed in the face section through cold forging. Takeda uses grinding to form cavity (12) directly behind the striking face.

Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sebastiano Passaniti whose telephone number is 703-308-1006. The examiner can normally be reached on Mon-Fri (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Sewell can be reached on 703-308-2126. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

*S. Passaniti*  
Sebastiano Passaniti  
Primary Examiner  
Art Unit 3711

S.Passaniti/sp  
October 14, 2003